

REMARKS

Claims 1-44 are pending in the subject application. Claims 1, 9, 15, 16, and 36 are amended herein. Claims 8, 35, and 40-44 are canceled, without prejudice. Support for the amendments to claims is found throughout the Specification and claims, as filed, and no new matter is presented by the amendment.

Applicant wishes to thank the Examiner for the courtesy of an interview conducted on October 12, 2005 with Applicant's representatives. During the interview, the rejections of the claims were discussed, and potential claim amendments were also discussed.

Favorable reconsideration in light of the amendments are remarks which follow a respectfully requested.

1. 35 U.S.C. 102 Rejections

Claims 1-7, 10-21, 23, 30-34, 37-42, and 44 are rejected under 35 U.S.C. 102(b) over Bucholz (U.S. 5,871,445).

Applicants respectfully traverse.

Applicants' claim, in independent claim 1, an imaging system for invasive therapy of a patient comprising an imaging apparatus that can provide a cross-sectional image of a patient; and a medical instrument comprising a fiducial object that can be simultaneously imaged in the same image as a targeted site of the patient. The fiducial object comprises three N-shaped fiducial motifs, each on a coplanar space, wherein the coplanar space of each N-shaped fiducial motif is non-coplanar.

Applicants' claim, in independent claim 16, a method for guiding invasive therapy in a patient comprising a) providing a system that comprises an imaging apparatus and a medical

instrument comprising a fiducial object that can be simultaneously imaged in the same image as a targeted site of the patient, the fiducial object comprising three N-shaped fiducial motifs each on a coplanar space, the coplanar space of each N-shaped fiducial motif being non-coplanar; b) obtaining a cross-sectional image that comprises both the fiducial object and the targeted site of the patient; and c) manipulating the instrument with respect to the patient using information derived from the image.

Applicants respectfully submit that none of the cited art, including Bucholz, teaches or suggests such an imaging system or method that includes or uses a medical instrument comprising a fiducial object that can be simultaneously imaged in the same image as a targeted site of the patient, wherein the fiducial object comprises three non-coplanar N-shaped fiducial motifs.

Accordingly, claims 1 and 16 are patentable over Bucholz. Claims 2-7, 9-34, and 36-39 depend from claims 1 and 16 and, likewise, are patentable over Bucholz. Reconsideration and withdrawal of the rejections is respectfully requested.

2. 35 U.S.C. 103 Rejections

Claims 8, 9, 22, 35, 36, and 43 are rejected under 35 U.S.C. 103(a) over Bucholz.

Applicants respectfully traverse.

As set forth above, Bucholz does not teach or suggest an imaging system or method that includes or uses a medical instrument comprising a fiducial object that can be simultaneously imaged in the same image as a targeted site of the patient, wherein the fiducial object comprises three non-coplanar N-shaped fiducial motifs. Rather, this comes purely from Applicants' teaching. Applicants' unique imaging system allows for minimally invasive image-guided interventions with a single cross-sectional image and without the use of a stereotactic frame,

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patient immobilization, or separate fiducial implantation. Bucholz's imaging system and method does not provide for such interventions.

Accordingly, claims 1 and 16 are patentable over Bucholz. Claims 2-7, 9-34, and 36-39 depend from claims 1 and 16 and, likewise, are patentable over Bucholz. Reconsideration and withdrawal of the rejections is respectfully requested.

Claims 24-29 are rejected under 35 U.S.C. 103(a) over Bucholz in view of Gilles et al.

Applicants respectfully traverse.

As set forth above, Bucholz does not teach or suggest an imaging system or method that includes or uses a medical instrument comprising a fiducial object that can be simultaneously imaged in the same image as a targeted site of the patient, wherein the fiducial object comprises three non-coplanar N-shaped fiducial motifs.

Gilles et al. is cited for its description of therapeutic processes used in connection with a stereotactical device. However, like Bucholz, Gilles et al. does not teach or suggest, an imaging system or method that includes or uses a medical instrument comprising a fiducial object that can be simultaneously imaged in the same image as a targeted site of the patient, wherein the fiducial object comprises three non-coplanar N-shaped fiducial motifs.

Accordingly, claim 16 is patentable over Bucholz in view of Gilles et al. Claims 24-29 depend from claim 16 and, likewise, are patentable over Bucholz in view of Gilles et al. Reconsideration and withdrawal of the rejections is respectfully requested.

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CONCLUSION

It is respectfully submitted that the subject application is in a condition for allowance.
Early and favorable action is requested.

If for any reason a fee is required, a fee paid is inadequate or credit is owed for any
excess fee paid, the Commissioner is hereby authorized and requested to charge Deposit Account
No. 04-1105.

Respectfully submitted,
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